

## **REMARKS**

### **INTRODUCTION**

Claims 1-38 were previously pending and under consideration.

Claims 3, 7, 11, 15, 20, 24, 28 and 32 are cancelled herein.

Claim 39 is added herein.

Therefore, claims 1-2, 4-6, 8-10, 12-14, 16-19, 21-23, 25-27, 29-31, and 33-39 are now pending and under consideration.

Claims 1-38 were rejected.

Claims 1, 4, 5, 8, 9, 12, 13, 16, 18, 21, 22, 25, 26, 29, 30 and 35 are amended herein.

No new matter is being presented, and approval and entry are respectfully requested.

### **REJECTIONS UNDER 35 USC § 112, SECOND PARAGRAPH**

In the Office Action, at page 2, claims 37 and 38 were rejected under 35 U.S.C. § 112, second paragraph, for the reasons set forth therein. Antecedent basis for "said second virtual world" is now provided. Withdrawal of the rejection is respectfully requested.

### **REJECTIONS UNDER 35 USC § 102**

In the Office Action, at pages 2-3, claims 35-38 were rejected under 35 U.S.C. § 102 as anticipated by Burge. This rejection is traversed and reconsideration is requested.

Amended claim 35 now recites an image of a first three-dimensional virtual world is displayed, the first three-dimensional virtual world includes predefined objects and an avatar controlled by the user, the objects are associated with respective specific items of content, the avatar is controlled to act in the first virtual world by the user, the positions of said avatar in the first virtual world that are inputted by the user, the action of the avatar in the first virtual world is analyzed to derive weighted features of the user from positions and behaviors of the avatar

### **REJECTIONS UNDER 35 USC § 103**

In the Office Action, at pages 3-7, claims 1-34 were rejected under 35 U.S.C. § 103 as being obvious over Burge in view of Brush. This rejection is traversed and reconsideration is respectfully requested.

Amended independent claims 1, 9, 18, and 26 recite an image of a first three-dimensional virtual world is displayed, the first three-dimensional virtual world includes predefined objects and an avatar controlled by the user, the objects are associated with respective specific items of content, the avatar is controlled to act in the first virtual world by the user, positions of said avatar are controlled by the user, the action of the avatar in the first virtual world is analyzed to derive weighted features (e.g. interests, preferences, etc.), of the user from the positions and behaviors of the avatar relative to positions of the predefined objects in the first virtual world. A second three-dimensional virtual world, including other objects in accordance with the derived weighted features, is variably derived (e.g. dynamically in accordance with) and the other objects have respective specific optimal items of content and respective specific optimal positions in the second virtual world, for the derived weighted features. The avatar is a representative of the user in the virtual world(s). The positions and behaviors of the avatar in the virtual world are analyzed to derive the weighted features of the user and to determine a second virtual world, which includes objects in accordance with the derived weighted features. The user's features (e.g. preferences or interests) are automatically derived from the positions and behaviors of the avatar in the first virtual world. Analyzing positions and behaviors of the avatar controlled by the user in the three-dimensional virtual world can lead to determining a second virtual world including optimal objects for the user in accordance with the derived weighted features.

As mentioned above, Burge discusses displaying options for a shopper, which the shopper selects to determine the shopper's preferences. Burge also discusses creating displays customized according to the shopper's preferences.

Brush discusses a salesperson avatar that pursues a course of action based on conclusions drawn from the outwardly observable characteristics of the customer avatar that are selected by the user and the avatar's reactions to the salesperson avatar.

Burge and Brush alone or in combination neither disclose nor suggest analyzing actions

relative to positions of the predefined objects in the first virtual world and variably determine a second three-dimensional virtual world including other objects in accordance with the derived weighted features, and the other objects have respective specific optimal items of content and respective specific optimal positions in the second three-dimensional virtual world, for the derived weighted features. In other words, a user controls an avatar in a first virtual world. The positions and behaviors of the avatar in the virtual world are analyzed to derive the weighted features (e.g. interests, preferences, etc.) of the user. The behavior of the avatar may include, for example, attitude (orientation) toward the objects, time near the objects, time taken to approach the objects, etc. The user's features (e.g. interests) are derived from the positions and behaviors of the avatar in the first virtual world.

Burge discusses displaying options for a shopper to select, and the shopper selects the options to determine preferences. Displays are customized according to the shopper's selected preferences. Burge neither discloses nor suggests analyzing actions of an avatar in a first virtual world to derive weighted features of the user from the positions and behaviors of the avatar relative to the positions of the predefined objects in the first three-dimensional virtual world. Furthermore, Burge does not disclose or suggest variably determining, in accordance with the derived weighted features, a second three-dimensional virtual world including other objects having respective specific optimal items of content and respective specific optimal positions in the second three-dimensional virtual world for the derived weighted features.

Burge discusses displaying options for the shopper to select to determine the shopper's preferences, and creating displays customized according to the shopper's preferences. In Burge, the shopper's avatar is not presented in the display, and hence it is impossible to analyze the shopper's/avatar's positions and behaviors relative to the positions of the predefined objects in the first virtual world. In Burge, the shopper is urged to select different options before reaching his customized display, which is a nuisance for the shopper and provides suboptimal display of items of interest to the shopper.

In view of the above, it is respectfully submitted that claim 35 is distinguishable over Burge. Withdrawal of the rejection is respectfully requested.

of an avatar controlled by a user in a first virtual world to derive weighted features of the user from the positions and behaviors of the avatar relative to the positions of the predefined objects associated with respective specific items of content in the first three-dimensional virtual world. The Burge-Brush combination does not disclose or suggest and variably determining, in accordance with the derived weighted features, a second three-dimensional virtual world including other objects having respective specific optimal items of content and respective specific optimal positions in the second three-dimensional virtual world according to the derived weighted features.

In Burge, the shopper's avatar is not presented within the display. Therefore it is impossible to automatically analyze the shopper's positions and behaviors relative to the positions of the predefined objects in the first virtual world (or thereby determine user features). In Burge, the shopper must select an option before reaching a customized display. In addition, the shopper sometimes must attend to his or her own preferences. There is no automated determining of a feature (e.g. preference) of the user based on avatar control within the virtual world.

In Brush, the salesperson avatar's reactions are determined according to outwardly observable characteristics of the customer avatar, where the user has selected the characteristics as reactions to the salesperson avatar. The outwardly observable characteristics of the customer avatar are not used to derive a second virtual world. The customer avatar itself selects one of the stores and explicitly expresses characteristics of items to buy. Positions and behaviors of the customer avatar relative to positions of predefined objects associated with respective specific items of content in the virtual world are not used for determining the optimal items of content and optimal positions in the store for the user.

Manohar discusses an interactive and dynamically customized guided tour of some portion of the WWW. However, Manohar does not disclose or suggest features of the present claims discussed above.

In view of the above, it is respectfully submitted that amended independent claims 1, 9, 18 and 26 are distinguishable from the cited prior art combination. Withdrawal of the rejection is respectfully requested.

## DEPENDENT CLAIMS

The dependent claims are deemed patentable due at least to their dependence from allowable independent claims. These claims are also patentable due to their recitation of independently distinguishing features. For example, claim 5 recites that "a further weighted feature of said user is derived from data related to said user to determine said second virtual world". This feature is not taught or suggested by the prior art. Withdrawal of the rejection of the dependent claims is respectfully requested.

## NEW CLAIMS

New claim 39 has been added to provide broadened aspects of the present invention and to provide alternative language for reciting the present invention.

## CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 / Alexandria, VA 22313-1450 on February 19, 20 04  
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